

**939 Fuel System Cleaner MF93900300C**

Print date: 07.01.2020

Product code: 1101665

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**SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1. Product identifier**

939 Fuel System Cleaner MF93900300C

**1.2. Relevant identified uses of the substance or mixture and uses advised against****Use of the substance/mixture**

Additive

**1.3. Details of the supplier of the safety data sheet**

Company name:	TUNAP GmbH & Co. KG	
Street:	Bürgermeister-Seidl-Str. 2	
Place:	D-82515 Wolfratshausen	
Telephone:	+49 (0) 8171/1600 - 0	Telefax: +49 (0) 8171/1600 - 40
e-mail:	sdb@tunap.com	
Internet:	www.tunap.com	

**1.4. Emergency telephone number:** +49 (0) 30 30 686 790 (Giftnotruf Berlin)**SECTION 2: Hazards identification****2.1. Classification of the substance or mixture****Regulation (EC) No. 1272/2008**

Hazard categories:

Flammable liquid: Flam. Liq. 2

Skin corrosion/irritation: Skin Irrit. 2

Serious eye damage/eye irritation: Eye Dam. 1

Hazardous to the aquatic environment: Aquatic Chronic 2

Hazard Statements:

Highly flammable liquid and vapour.

Causes skin irritation.

Causes serious eye damage.

Toxic to aquatic life with long lasting effects.

**2.2. Label elements****Regulation (EC) No. 1272/2008****Hazard components for labelling**

Oxirane, 2-ethyl-, homopolymer, 3-aminopropyl C 11-14-isoalkyl ethers, C13-rich

Reaction mass of 2,6-di-tert-butylphenol and 2,4,6-tri-tert-butylphenol  
cyclohexyldimethylamine**Signal word:** Danger**Pictograms:****Hazard statements**

H225	Highly flammable liquid and vapour.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H411	Toxic to aquatic life with long lasting effects.

**Precautionary statements**

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No
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according to Regulation (EC) No 1907/2006

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P260	smoking.
P280	Do not breathe vapours.
P273	Wear eye protection.
P302+P352	Avoid release to the environment.
P305+P351+P338	IF ON SKIN: Wash with plenty of soap and water.
	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P313	If eye irritation persists: Get medical advice/attention.

**2.3. Other hazards**

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

**SECTION 3: Composition/information on ingredients****3.2. Mixtures****Hazardous components**

CAS No	Chemical name	Quantity
	EC No	Index No
	REACH No	
	GHS Classification	
64-17-5	ethanol	50 - <= 100 %
	200-578-6	603-002-00-5
	01-2119457610-43	
	Flam. Liq. 2, Eye Irrit. 2; H225 H319	
1398506-12-1	Oxirane, 2-ethyl-, homopolymer, 3-aminopropyl C11-14-isoalkyl ethers, C13-rich	10 - < 20 %
	805-631-2	
	Acute Tox. 4, Eye Dam. 1, Aquatic Chronic 2; H302 H318 H411	
	Reaction mass of 2,6-di-tert-butylphenol and 2,4,6-tri-tert-butylphenol	1 - < 3 %
	907-745-9	01-2119538013-5
	Eye Dam. 1, Aquatic Acute 1, Aquatic Chronic 1; H318 H400 H410	
98-94-2	cyclohexyldimethylamine	1 - < 3 %
	202-715-5	
	Flam. Liq. 3, Acute Tox. 3, Acute Tox. 3, Acute Tox. 3, Skin Corr. 1B; H226 H331 H311 H301 H314	
110-25-8	N-methyl-N-[C18-(unsaturated)alkanoyl]glycine	0.1 - < 1 %
	701-177-3	01-2119488991-20
	Acute Tox. 4, Skin Irrit. 2, Eye Dam. 1, Aquatic Acute 1; H332 H315 H318 H400	
95-38-5	2-(2-heptadec-8-enyl-2-imidazolyl)ethanol	0.1 - < 1 %
	202-414-9	01-2119777867-13
	Acute Tox. 4, Skin Corr. 1C, STOT RE 2, Aquatic Acute 1 (M-Factor = 10), Aquatic Chronic 1; H302 H314 H373 H400 H410	

Full text of H and EUH statements: see section 16.

**SECTION 4: First aid measures****4.1. Description of first aid measures****General information**

First aider: Pay attention to self-protection! Remove persons to safety. Never give anything by mouth to an unconscious person or a person with cramps.

**After inhalation**

Remove person to fresh air and keep comfortable for breathing. In all cases of doubt, or when symptoms

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persist, seek medical advice.

**After contact with skin**

Wash with plenty of water and soap. Take off immediately all contaminated clothing and wash it before reuse.

In all cases of doubt, or when symptoms persist, seek medical advice.

**After contact with eyes**

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. In case of troubles or persistent symptoms, consult an ophthalmologist.

**After ingestion**

Do NOT induce vomiting. Observe risk of aspiration if vomiting occurs. Call a physician in any case!

**4.2. Most important symptoms and effects, both acute and delayed**

Headache, nausea, dizziness, fatigue, skin irritation

**4.3. Indication of any immediate medical attention and special treatment needed**

Treat symptomatically. Call a POISON CENTER. Symptoms can occur only after several hours.

**SECTION 5: Firefighting measures****5.1. Extinguishing media****Suitable extinguishing media**

Water fog. Foam. Carbon dioxide (CO<sub>2</sub>). Extinguishing powder.

**Unsuitable extinguishing media**

High power water jet.

**5.2. Special hazards arising from the substance or mixture**

Incomplete combustion and thermolysis gases of different toxicity can occur. In the case of hydrocarbonaceous products such as CO, CO<sub>2</sub>, aldehydes and soot. These can be very dangerous if they are inhaled in high concentrations or in enclosed spaces.

**5.3. Advice for firefighters**

In case of fire and/or explosion do not breathe fumes. Move undamaged containers from immediate hazard area if it can be done safely. In case of fire: Wear self-contained breathing apparatus.

**Additional information**

Use water spray jet to protect personnel and to cool endangered containers. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

**SECTION 6: Accidental release measures****6.1. Personal precautions, protective equipment and emergency procedures**

Wear breathing apparatus if exposed to vapours/dusts/aerosols. Remove all sources of ignition. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Wear personal protection equipment.

**6.2. Environmental precautions**

Do not allow to enter into surface water or drains. Prevent spread over a wide area (e.g. by containment or oil barriers). Ensure all waste water is collected and treated via a waste water treatment plant.

**6.3. Methods and material for containment and cleaning up**

Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents). Clean contaminated articles and floor according to the environmental legislation.

**6.4. Reference to other sections**

Safe handling: see section 7

Personal protection equipment: see section 8

Disposal: see section 13

**SECTION 7: Handling and storage**


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**7.1. Precautions for safe handling**
**Advice on safe handling**

Observe instructions for use.

Dust must be exhausted directly at the point of origin. Vapours/aerosols must be exhausted directly at the point of origin. If local exhaust ventilation is not possible or not sufficient, the entire working area should be ventilated by technical means.

When using do not eat, drink, smoke, sniff.

Wear personal protection equipment (refer to section 8).

**Advice on protection against fire and explosion**

Keep away from sources of ignition - No smoking.

**Further information on handling**

Avoid contact with skin and eyes.

**7.2. Conditions for safe storage, including any incompatibilities**
**Requirements for storage rooms and vessels**

Keep container tightly closed. Observe legal regulations and provisions.

**Hints on joint storage**

Do not store together with: Oxidizing agents. Pyrophoric or self-heating substances. Food and feedingstuffs.

**Further information on storage conditions**

Store in a cool dry place. Observe legal regulations and provisions.

**7.3. Specific end use(s)**

No information available.

**SECTION 8: Exposure controls/personal protection**
**8.1. Control parameters**
**Exposure limits (EH40)**

CAS No	Substance	ppm	mg/m <sup>3</sup>	fibres/ml	Category	Origin
64-17-5	Ethanol	1000	1920		TWA (8 h)	WEL


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**DNEL/DMEL values**

CAS No	Substance	Exposure route	Effect	Value
DNEL type	Reaction mass of 2,6-di-tert-butylphenol and 2,4,6-tri-tert-butylphenol			
Worker DNEL, long-term	inhalation	systemic	3,5 mg/m <sup>3</sup>	
Worker DNEL, long-term	dermal	systemic	0,5 mg/kg bw/day	
110-25-8	N-methyl-N-[C18-(unsaturated)alkanoyl]glycine			
Worker DNEL, long-term	inhalation	systemic	0,8 mg/m <sup>3</sup>	
Worker DNEL, long-term	dermal	systemic	20 mg/kg bw/day	
Consumer DNEL, long-term	inhalation	systemic	0,4 mg/m <sup>3</sup>	
Consumer DNEL, long-term	dermal	systemic	10 mg/kg bw/day	
Consumer DNEL, long-term	oral	systemic	10 mg/kg bw/day	
95-38-5	2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethanol			
Worker DNEL, long-term	inhalation	systemic	0,46 mg/m <sup>3</sup>	
Worker DNEL, acute	inhalation	systemic	14 mg/m <sup>3</sup>	
Worker DNEL, long-term	dermal	systemic	0,06 mg/kg bw/day	
Worker DNEL, acute	dermal	systemic	2 mg/kg bw/day	

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**PNEC values**

CAS No	Substance	Value
Environmental compartment		
Reaction mass of 2,6-di-tert-butylphenol and 2,4,6-tri-tert-butylphenol		
Freshwater		0,0003 mg/l
Marine water		0,00003 mg/l
Freshwater sediment		0,09 mg/kg
Marine sediment		0,009 mg/kg
Secondary poisoning		8,33 mg/kg
Micro-organisms in sewage treatment plants (STP)		2,4 mg/l
Soil		0,044 mg/kg
110-25-8	N-methyl-N-[C18-(unsaturated)alkanoyl]glycine	
Freshwater		0,00043 mg/l
Freshwater (intermittent releases)		0,0043 mg/l
Marine water		0,000043 mg/l
Freshwater sediment		0,007 mg/kg
Marine sediment		0,001 mg/kg
Micro-organisms in sewage treatment plants (STP)		1 mg/l
Soil		1,71 mg/kg
95-38-5	2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethanol	
Freshwater		0 mg/l
Freshwater (intermittent releases)		0 mg/l
Marine water		0 mg/l
Freshwater sediment		0,376 mg/kg
Marine sediment		0,038 mg/kg
Micro-organisms in sewage treatment plants (STP)		0,27 mg/l
Soil		0,075 mg/kg

**Additional advice on limit values**

- a no restriction
- b End of exposure or end of shift
- c at long term exposure: after several previous shifts
- d before next shift

blood (B)  
Urine (U)

**8.2. Exposure controls****Appropriate engineering controls**

If handled uncovered, arrangements with local exhaust ventilation have to be used.

**Protective and hygiene measures**

Avoid exposure. Wear suitable protective clothing. Draw up and observe skin protection programme.

**Eye/face protection**

Suitable eye protection: Tightly sealed safety glasses.  
DIN EN 166

**Hand protection**

Protect skin by using skin protective cream. When handling with chemical substances, protective gloves must



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be worn with the CE-label including the four control digits. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances.

Suitable material: NBR (Nitrile rubber) Breakthrough time (maximum wearing time) 480min

Thickness of the glove material 0,45 mm

EN ISO 374

#### Skin protection

Wear suitable protective clothing. Take off immediately all contaminated clothing and wash it before reuse.

#### Respiratory protection

Wear breathing apparatus if exposed to vapours/dusts/aerosols.

When exceeding the relevant workplace exposure limits, note the following:

Suitable respiratory protective equipment: Combination filter device (DIN EN 141)..

Filtering device with filter or ventilator filtering device of type: A

Observe the wear time limits as specified by the manufacturer.

Observe legal regulations and provisions.

#### Environmental exposure controls

Observe legal regulations and provisions.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state:	Liquid
Colour:	yellow, clear
Odour:	alcoholic

	Test method
pH-Value (at 20 °C):	not determined DIN 19268

#### Changes in the physical state

Melting point:	not determined
Initial boiling point and boiling range:	78 °C
Sublimation point:	not applicable
Softening point:	not applicable
Pour point:	not applicable
Flash point:	12 °C ISO 3679
Sustaining combustion:	No data available

#### Flammability

Solid:	not applicable
Gas:	not applicable
Lower explosion limits:	3,5
Upper explosion limits:	15
Ignition temperature:	400 °C

#### Auto-ignition temperature

Solid:	not applicable
Gas:	not applicable
Decomposition temperature:	not determined

#### Oxidizing properties

Not oxidising.	
Vapour pressure:	not determined
Density (at 20 °C):	0,817 g/cm <sup>3</sup> DIN 51757

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Water solubility:	easily soluble
<b>Solubility in other solvents</b> not determined	
Partition coefficient:	not determined
Viscosity / dynamic:	DIN 53019-1
Viscosity / kinematic: (at 40 °C)	< 7 mm <sup>2</sup> /s DIN EN ISO 3104
Flow time: (at 20 °C)	DIN EN ISO 2431
Vapour density:	not determined
Evaporation rate:	not determined

**9.2. Other information**

Solid content: not determined

**SECTION 10: Stability and reactivity****10.1. Reactivity**

Flammable Liquid, Category 4

**10.2. Chemical stability**

The product is stable under normal conditions.

**10.3. Possibility of hazardous reactions**

No hazardous reaction when handled and stored according to provisions.

**10.4. Conditions to avoid**

Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Take precautionary measures against static discharges.

**10.5. Incompatible materials**

Oxidizing agents. Pyrophoric or self-heating substances.

**10.6. Hazardous decomposition products**

Incomplete combustion and thermolysis gases of different toxicity can occur. In the case of hydrocarbonaceous products such as CO, CO<sub>2</sub>, aldehydes and soot. These can be very dangerous if they are inhaled in high concentrations or in enclosed spaces.

**Further information**

Do not mix with other chemicals.

**SECTION 11: Toxicological information****11.1. Information on toxicological effects****Toxicokinetics, metabolism and distribution**

There are no data available on the mixture itself.

**Acute toxicity**

Based on available data, the classification criteria are not met.




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CAS No	Chemical name			
	Exposure route	Dose	Species	Source
64-17-5	ethanol			
	oral	LD50 6200 mg/kg	Rat	IUCLID
	dermal	LD50 >20000 mg/kg	Rat	
	inhalation (4 h) vapour	LC50 95,6 mg/l	Rat	RTECS
1398506-12-1	Oxirane, 2-ethyl-, homopolymer, 3-aminopropyl C11-14-isoalkyl ethers, C13-rich			
	oral	LD50 > 5000 mg/kg	Rat	
	dermal	LD50 > 2000 mg/kg	Rabbit	
	Reaction mass of 2,6-di-tert-butylphenol and 2,4,6-tri-tert-butylphenol			
	oral	LD50 2976 mg/kg	Rat	Study report (1991)
	dermal	LD50 > 2000 mg/kg	Rat	Study report (1991)
98-94-2	cyclohexyldimethylamine			
	oral	LD50 272 mg/kg	Rat	
	dermal	LD50 >400 mg/kg	Rat	
	inhalation (1 h) vapour	LC50 9 mg/l	Rat	
	inhalation aerosol	ATE 0,5 mg/l		
110-25-8	N-methyl-N-[C18-(unsaturated)alkanoyl]glycine			
	oral	LD50 > 5000 mg/kg	Rat	Study report (1981)
	inhalation vapour	ATE 11 mg/l		
	inhalation (4 h) aerosol	LC50 1,37 mg/l	Rat	
95-38-5	2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethanol			
	oral	LD50 ca. 1085 mg/kg	Rat	Study report (1989)
	dermal	LD50 >2000 mg/kg	Rabbit	

**Irritation and corrosivity**

Causes skin irritation.

Causes serious eye damage.

**Sensitising effects**

Based on available data, the classification criteria are not met.

**Carcinogenic/mutagenic/toxic effects for reproduction**

Based on available data, the classification criteria are not met.

No indications of human carcinogenicity exist.

No indications of human germ cell mutagenicity exist.

No indications of human reproductive toxicity exist.

**STOT-single exposure**

Based on available data, the classification criteria are not met.

**STOT-repeated exposure**

Based on available data, the classification criteria are not met.

**Aspiration hazard**

Based on available data, the classification criteria are not met.

**Specific effects in experiment on an animal**

No information available.



according to Regulation (EC) No 1907/2006

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**Additional information on tests**

The mixture is classified as hazardous according to regulation (EC) No 1272/2008 [CLP].

**SECTION 12: Ecological information****12.1. Toxicity**

Toxic to aquatic life with long lasting effects.

CAS No	Chemical name				
	Aquatic toxicity	Dose	[h]   [d]	Species	Source
64-17-5	ethanol				
	Acute fish toxicity	LC50 14200 mg/l	96 h	Pimephales promelas (fathead minnow)	
	Acute crustacea toxicity	EC50 9268 - 14221 mg/l	48 h	Daphnia magna	IUCLID
1398506-12-1	Oxirane, 2-ethyl-, homopolymer, 3-aminopropyl C11-14-isoalkyl ethers, C13-rich				
	Acute fish toxicity	LC50 >1 - 10 mg/l	96 h	Oncorhynchus mykiss (Rainbow trout)	
	Acute crustacea toxicity	EC50 >1 mg/l	48 h	Daphnia magna	
	Reaction mass of 2,6-di-tert-butylphenol and 2,4,6-tri-tert-butylphenol				
	Acute fish toxicity	LC50 0,3 mg/l	96 h	Oncorhynchus mykiss (Rainbow trout)	
	Acute algae toxicity	ErC50 4,9 mg/l	72 h	Pseudokirchneriella subcapitata	Study report (1993)
	Acute crustacea toxicity	EC50 0,4 mg/l	48 h	Daphnia magna	Study report (1993)
98-94-2	cyclohexyldimethylamine				
	Acute fish toxicity	LC50 >20 mg/l	96 h	Pimephales promelas	
	Acute crustacea toxicity	EC50 75 mg/l	48 h	Daphnia magna	
110-25-8	N-methyl-N-[C18-(unsaturated)alkanoyl]glycine				
	Acute fish toxicity	LC50 > 0,43 mg/l	96 h	Leuciscus idus	REACH Registration Dossier
	Acute algae toxicity	ErC50 5,1 mg/l	72 h	Desmodesmus subspicatus	REACH Registration Dossier
	Acute crustacea toxicity	EC50 0,53 mg/l	48 h	Daphnia magna	REACH Registration Dossier
	Acute bacteria toxicity	(1300 mg/l)	3 h	Activated sludge	REACH Registration Dossier
95-38-5	2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethanol				
	Acute fish toxicity	LC50 0,3 mg/l	96 h	Brachydanio rerio (zebra-fish)	
	Acute algae toxicity	ErC50 0,03 mg/l	72 h	Desmodesmus subspicatus	Study report (2010)
	Acute crustacea toxicity	EC50 0,163 mg/l	48 h	Daphnia magna	Study report (2010)

**12.2. Persistence and degradability**

The product has not been tested.

**12.3. Bioaccumulative potential**

The product has not been tested.



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#### Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
64-17-5	ethanol	-0,31
	Reaction mass of 2,6-di-tert-butylphenol and 2,4,6-tri-tert-butylphenol	4,5 - 5,3
110-25-8	N-methyl-N-[C18-(unsaturated)alkanoyl]glycine	>= 3,5
95-38-5	2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethanol	8,4

#### BCF

CAS No	Chemical name	BCF	Species	Source
	Reaction mass of 2,6-di-tert-butylphenol and 2,4,6-tri-tert-butylphenol	660		Read-across (2010)
110-25-8	N-methyl-N-[C18-(unsaturated)alkanoyl]glycine	1,98	fish	BCFBAF version 3.01
95-38-5	2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethanol	371,8		EPIWIN calculation (

#### 12.4. Mobility in soil

The product has not been tested.

#### 12.5. Results of PBT and vPvB assessment

The product has not been tested.

#### 12.6. Other adverse effects

No information available.

#### Further information

Avoid release to the environment.

### SECTION 13: Disposal considerations

#### 13.1. Waste treatment methods

##### Disposal recommendations

Do not allow to enter into surface water or drains. Dispose of waste according to applicable legislation.

##### List of Wastes Code - residues/unused products

070704 WASTES FROM ORGANIC CHEMICAL PROCESSES; wastes from the MFSU of fine chemicals and chemical products not otherwise specified; other organic solvents, washing liquids and mother liquors; hazardous waste

##### List of Wastes Code - used product

070704 WASTES FROM ORGANIC CHEMICAL PROCESSES; wastes from the MFSU of fine chemicals and chemical products not otherwise specified; other organic solvents, washing liquids and mother liquors; hazardous waste

##### List of Wastes Code - contaminated packaging

150110 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); packaging containing residues of or contaminated by hazardous substances; hazardous waste

##### Contaminated packaging

Water (with cleaning agent). Completely emptied packages can be recycled.

### SECTION 14: Transport information

#### Land transport (ADR/RID)

##### 14.1. UN number:

UN 1170

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<b>14.2. UN proper shipping name:</b>	ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)
<b>14.3. Transport hazard class(es):</b>	3
<b>14.4. Packing group:</b>	II
Hazard label:	3
Classification code:	F1
Special Provisions:	144 601
Limited quantity:	1 L
Excepted quantity:	E2
Transport category:	2
Hazard No:	33
Tunnel restriction code:	D/E

**Inland waterways transport (ADN)**

<b>14.1. UN number:</b>	UN 1170
<b>14.2. UN proper shipping name:</b>	ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)
<b>14.3. Transport hazard class(es):</b>	3
<b>14.4. Packing group:</b>	II
Hazard label:	3
Classification code:	F1
Special Provisions:	144 601
Limited quantity:	1 L
Excepted quantity:	E2

**Marine transport (IMDG)**

<b>14.1. UN number:</b>	UN 1170
<b>14.2. UN proper shipping name:</b>	ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION) (Oxirane, 2-ethyl-, homopolymer, 3-aminopropyl C11-14-isoalkyl ethers, C13-rich)
<b>14.3. Transport hazard class(es):</b>	3
<b>14.4. Packing group:</b>	II
Hazard label:	3
Marine pollutant:	no
Special Provisions:	144
Limited quantity:	1 L
Excepted quantity:	E2
EmS:	F-E, S-D

**Air transport (ICAO-TI/IATA-DGR)**

<b>14.1. UN number:</b>	UN 1170
<b>14.2. UN proper shipping name:</b>	ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)
<b>14.3. Transport hazard class(es):</b>	3
<b>14.4. Packing group:</b>	II
Hazard label:	3
Special Provisions:	A3 A58 A180
Limited quantity Passenger:	1 L
Passenger LQ:	Y341
Excepted quantity:	E2
IATA-packing instructions - Passenger:	353
IATA-max. quantity - Passenger:	5 L
IATA-packing instructions - Cargo:	364
IATA-max. quantity - Cargo:	60 L

**14.5. Environmental hazards**


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ENVIRONMENTALLY HAZARDOUS: yes  
 Danger releasing substance: Oxirane, 2-ethyl-, homopolymer, 3-aminopropyl C 11-14-isoalkyl ethers, C13-rich

**14.6. Special precautions for user**

Warning: Combustible liquid.

**14.7. Transport in bulk according to Annex II of Marpol and the IBC Code**

not applicable

**SECTION 15: Regulatory information**
**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**
**EU regulatory information**

2010/75/EU (VOC): No information available.  
 2004/42/EC (VOC): No information available.

**Additional information**

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH)

**National regulatory information**

Water contaminating class (D): 2 - clearly water contaminating

**SECTION 16: Other information**
**Changes**

This data sheet contains changes from the previous version in section(s): 2,11,12,13,15,16.

**Abbreviations and acronyms**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)  
 RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)  
 IATA: International Air Transport Association  
 IMDG: International Maritime Code for Dangerous Goods  
 GHS: Globally Harmonized System of Classification and Labelling of Chemicals  
 EINECS: European Inventory of Existing Commercial Chemical Substances  
 ELINCS: European List of Notified Chemical Substances  
 CAS: Chemical Abstracts Service (division of the American Chemical Society)  
 DNEL/DMEL: Derived No Effect Level / Derived Minimal Effect Level  
 WEL (UK): Workplace Exposure Limits  
 TWA (EC): Time-Weighted Average  
 ATE: Acute Toxicity Estimate  
 STEL (EC) Short Term Exposure Limit  
 LC50: Lethal Concentration  
 EC50: half maximal Effective Concentration  
 ErC50: means EC50 in terms of reduction of growth rate

**Relevant H and EUH statements (number and full text)**

H225 Highly flammable liquid and vapour.  
 H226 Flammable liquid and vapour.  
 H301 Toxic if swallowed.  
 H302 Harmful if swallowed.  
 H311 Toxic in contact with skin.  
 H314 Causes severe skin burns and eye damage.  
 H315 Causes skin irritation.  
 H318 Causes serious eye damage.

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H319	Causes serious eye irritation.
H331	Toxic if inhaled.
H332	Harmful if inhaled.
H373	May cause damage to organs through prolonged or repeated exposure.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.

**Further Information**

Classification for mixtures and used evaluation method according to regulation (EC) No 1272/2008 [CLP]:  
Calculation method.

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

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*(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)*